

identifying one of a plurality of repeater ports serving a destination network node based on a destination address in the data packet;

transmitting the data packet on the one repeater port serving the destination network node by concurrently asserting a transmit enable signal on a corresponding media independent interface; and

corrupting transmission of the data packet on other repeater ports by concurrently asserting a transmit error signal and deasserting the transmit enable signal on the media independent interfaces corresponding to the other repeater ports;

receiving by a physical layer transmitter the transmit data, the deasserted transmit enable signal, and the asserted transmit error signal from at least one of the media independent interfaces corresponding to at least one of the other repeater ports; and

selectively transmitting a prescribed data pattern as corrupted transmit data from the physical layer transmitter to at least one of the network nodes corresponding to the at least one of the other repeater ports based on the received transmit data, the deasserted transmit enable signal, and the asserted transmit error signal.

Claim 8 (Cancelled)

9. (Currently Amended) The method of claim 8 7, wherein the selectively transmitting step includes detecting a predetermined condition in the transmit error signal and the transmit enable signal, the selectively transmitting step outputting the prescribed data pattern in response to the concurrent detection of the asserted transmit error signal

and the deasserted transmit enable signal contiguously following the predetermined condition.

10. (Original) The method of claim 9, wherein the step of detecting the predetermined condition comprises first detecting, contiguously following an idle state, a concurrent assertion of the transmit enable signal and deassertion of the transmit error signal for at least a first predetermined number of cycles.

11. (Currently Amended) The method of claim 7, further comprising selecting the predetermined data pattern based on an identified physical layer protocol between the destination network node and the physical layer transmitter.

Claims 12-15 (Cancelled)

16. (Currently Amended) A repeater system comprising:
repeater ports for communication with respective network nodes via respective repeater media independent interfaces; and

a repeater core comprising:

(1) a table for identifying each network node by its corresponding destination address and the corresponding repeater port, and

(2) a security circuit for transmitting a data packet on an identified one of the repeater ports corresponding to the network node

having the destination address specified in the data packet, the security circuit corrupting transmission of the data packet on other of the repeater ports corresponding to network nodes not having the destination address specified in the data packet by concurrently asserting a transmit error signal and deasserting a transmit enable signal on the respective media independent interfaces; and

at least one physical layer transceiver for receiving the transmitted data packet, the transmit error signal, and the deasserted transmit enable signal for at least one of the media independent interfaces corresponding to the other of the network ports, the physical layer transceiver outputting a prescribed data pattern as a corrupted data packet based on the concurrent assertion of the transmit error signal and the deassertion of the transmit enable signal.

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Claim 17 (Cancelled)

18. (Currently Amended) The system of claim ~~17~~ 16, wherein the physical layer transceiver outputs a modified transmit enable signal, a modified transmit error signal and the corrupted data packet to a second media independent interface for transmission to the corresponding network node based on the concurrent assertion of the transmit error signal and the deassertion of the transmit enable signal.

19. (Currently Amended) The system of claim ~~17~~ 16, wherein the physical layer transceiver includes a detection circuit for detecting a predetermined condition in the

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transmit error signal and the transmit enable signal, the physical layer transceiver outputting the corrupted data packet in response to the concurrent detection of the asserted transmit error signal and the deasserted transmit enable signal contiguously following the predetermined condition.
